

MILATARI NEWLETTER

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NEXT MEETING * * * Saturday, January 15th

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ATARI releases 1200XL

ATARI has released their new top-of-the-line computer. It has been designated the 1200XL.

The 1200XL has 64K RAM, 12 programable function keys and built-in diagnostics. The 1200XL uses the same 6502 microprocessor used in the 400 and 800 computers. Atari claims the 1200XL can run all software designed for the 400/800 as well as the same disk drive, printer and Cassette interface.

Atari said the system will ship in the first quarter of 1983 and will cost more than the 800 but less than \$1000.

This new ATARI has a full stroke keyboard, a foreign-language character set and a special HELP key that displays a menu stored in ROM. The machine does through a seven-minute self diagnostics routine when it is turned on. This test can be bypassed.



More information on the 1200XL and many other new ATARI releases are discussed in *PRESIDENT'S RAM* elsewhere in this issue.

==== JANUARY MEETING ADGENDA ====

3:00 PM BASIC CLASS - Introduction to graphics
TECHNICAL SESSION - Discuss hardware & software

4:00 PM BUSINESS MEETING

4:30 PM FEATURE PRESENTATION
Ron Friedel - Advanced music composer from APX
Nick Liberski - Record and play back
the human voice on your 400/800

5:30 PM INHOME keyboard for the 400
Library opens

Milwaukee Area ATARI Users Group

BYTES and NIBBLES
by David Frazer

This newsletter is written and printed by members of the Milwaukee Area ATARI Users Group (MILATARI), an association of individuals with a common interest in using and programming ATARI computers. MILATARI is not affiliated with the ATARI company, nor any other commercial organizations.

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Write MILATARI Newsletter at P.O. Box 1191, Waukesha, WI 53187 for more information.

MEMBERSHIP INFORMATION

Membership is open to individuals and families who are interested in using and programming ATARI computers. The membership includes the subscription to this newsletter and access to the user's library. The membership fee is \$12.00 per year. Contact Larry Leskovsek, Treas. at 542-0249 for more information.

MEETING INFORMATION

MILATARI meetings are held once monthly on the third Saturday. The meeting are held in the Community room of the Waukesha State Bank. The address is 110 Madison Street, Waukesha, Wis. Educational and technical sessions begin at 3:00 PM, Business meeting at 4:00 PM.

Tax session is upon us and now we have to show our spouse that our \$1000 investment we had to have to do our tax return can really to it.

I have seen information from two firms which have tax preparation software for ATARI. EZ TAX advertises it has a program to do all form for personal tax returns. Their support includes a 24 hour toll-free service line. The price is \$69.95 which is tax deductible. The address is 2444 Moorpark, San Jose, CA 95128. The second system is available from ATSUKO COMPUTING INTERNATIONAL. The package, called TAXMAN-83, is a set of templates to be used with VISICALC. The computer owner must own VISICALC to use the templates. This package lists for \$95 less a \$20 discount when payment is included with order. ATSUKO offices are at 303 Williams Avenue, Suite 1132, Huntsville, AL 35801.

Literature from both firms will be available at our next meeting.

If you like to increase the rate at which data is written to the disk, POKE 1913,87 will turn off read-after-write verify on a disk write. You can make this change permanent by going to DOS after doing the POKE. Choose option H, WRITE DOS FILES. The DOS.SYS file created can be used whenever the verify feature is not desired.

Want to double the number of disks you have at no additional cost? If you use both sides by just punching (carefully!!) a one-half circle, using a hole punch, on the opposite side of each disk.

PRESIDENT'S RAM

by Gary Nolan

January! First month of the year, and a time when the best laid plans of mice and men ect., ect.... It's the time of year when we usually see most of our resolutions go astray. Hopefully you'll do better on yours than I do on mine. And hopefully MILATARI will enjoy the same growth and success in '83 as we had in '82.

Next time you sit down in front of your computer you'll have to show it a little more respect. No more swearing at it when it locks-up in the middle of a program. Not only was the computer voted TIME's thing of the year, but the ATARI's are the home computer of the '84 Olympics. Mine is in training for the 48K dash.....Oh well, ONWARD!!!

At last!!! Some details from ATARI about the 1200XL. After reading an article in INFOWORLD's Jan.3 issue and getting information from other sources about the new computer from ATARI, I have some mixed feelings. On the surface it sounds like an 800 in new clothes. But maybe, just maybe there's something interesting hiding under that plastic case. And that case is smaller than the 800's. It looks more like the new 5200 game console. A keyboard like the 800 but with a set of function keys added across the top. Altogether you can have 12 pre-defined functions. The reset, option, select, start and the Atari logo (inverse video) keys have been moved to the top strip. It also has a HELP key that displays the menu stored in ROM for the self-diagnostics and can be programmed as a sort of panic button aid for the end user of your programs. Cartridge slot is on the left side as are the two joystick ports. Yes only two. How many of you use ports 3 & 4 that much? It has a serial port for drives, printers, modems ect.. Inside it uses a 6502 processor, has 64K of RAM, has built-in diagnostics, an internal foreign character set and can run all software written for the 800/400. It can also use the same peripherals. When turned on the system performs a seven minute diagnostic test. This test can be by-passed. It uses either a standard TV or monitor for display and has four sound voices that span three and one half octaves. There are also 4 (that's four) new graphics modes available from Basic. That gives us modes 1-15 still using the GTIA. The memo pad mode has been replaced with an ATARI logo and cartridges can be inserted and removed without powering down. In addition to the 1200XL, ATARI also announced some new products for the home computer line. First is a new higher density disk drive (no mention of capacity or price). Next is a new program recorder (Mod.1010) that has two channels, one for program info the other for sound effects, voice, ect. and uses standard cassettes. List is \$99.95. And two new printers. Model 1025 is a 80 col. dot matrix printer that supports the foreign character set of the 1200. List price is \$549. The model 1040 is a 40 col., four color printer/plotter that prints on 4 1/2 inch wide paper. List is \$299. ATARI will start shipping these goodies in March. Price for the 1200 was not announced, but they did say that it would sell for more than the 800 but for less than \$1000.

Changes are in store for the current systems. Both the 400 & 800 will undergo price reductions. I've seen 48K-800's being sold for \$499 by a couple of mail order houses. One even advertised a 16K-400 for \$179. Even Toys 'R' Us in Milwaukee was selling the 800 for \$499.95. The 800 is also undergoing some physical changes. First is that the memory and operating sys boards are no longer in the cartridge type cases. I've been saying for a long time that they run cooler without them and there's no more interference without them than with them. The boards are now secured to the

main board(whatever that means). The case has been redesigned to prevent access to these boards. Only the cart door will open on units produced after Jan. 1st. This could be a problem if they haven't found a way to prevent the contacts on these boards from getting "dirty".

The price changes are good news for our pocketbooks, but what happens to the buyers and owners of systems when computer stores are "forced" to drop the ATARI line? I say forced because computer stores can't match prices with Target, Toys 'R' Us and the big mail order places. Those owners that belong to users groups like MILATARI have a place to go to get help with thier problems. But new owners who buy a system from a discount house probably won't know about user groups and the advantages they offer. And most of the non-computer stores do not have qualified or at least knowledgable people. Why should they when computers make up only 2-5%, if that much, of their sales? One of these non-computer sources that's trying to help is the Schaak store on S. 27th St.. They will perform a diagnostic check on any system sold before it leaves the store. That's fine for a start. But what about later? Who helps you then? That's where we come in. In Milwaukee, especially, we are the biggest information resorce for ATARI owners. That's why I've been asking for help from you. Those of you who have some programming/technical knowledge are beeing asked to help not only present but potential members. Along those lines I'll give the names of those who have said that they will help form a kind of "Hot Line".

Name	Phone
William Lawrence	1-968-3082 Program.
Don Wilcox	228-1650 Program.
Erich Hanson	252-3146 Prog/Tech
Gary Nolan	353-9716 Prog/Tech
David Frazer	542-7242 Prog/Tech

I would again remind you to call at a reasonable time. Everyone has to eat and sleep.

Linda Scott is acting as a liaison for a reporter from the Wall Street Journal who is writting an article about first time computer users/owners. He would like anyone fitting the following catagories to give Linda thier stories. The catagories are:

1. Anyone who bought a computer and became discouraged with it.
2. Anyone who bought one for a specific application and changed the application or use.
3. Srtated from scratch and had it become the focal point of thier life
4. Anyone who has developed an unusual application for computers.

Those of you who might have a story to tell can contact Linda Scott (NOT the WSJ). Her phone number is 466-2314.

The introduction of Quixt, a new game from ATARI, is being delayed until late Febuary. To compensate for the delay a \$5 coupon will be packed with each game cartridge. The coupons will be good for any non-game program including APX programs. Other new games due for January release include two for 3 to 6 year olds called Juggles Rainbow and Juggles House, and one called Speed Reading.

Want to dress your children in ATARI clothes? Just go on down to SEARS.

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Not only are they now selling the 400 & 800 computers, but they also have a line of sweat type shirts and pants with the ATARI logo on them. They also have shirts with PAC-MAN and CENTIPEDE pictures on the front.

A new and not so new source of ATARI computers in town. The not so new is General Electronics 159 E. Silver Spring. They have been selling ATARI's for some time now. The new dealer is 3S Computer Center at 103 E. Silver Spring. They just opened around Christmas. Will have more to report at the next meeting.

For those with the 2600 game, The Electronic Connection on Howell rents cartridges. Call or stop in to get rates.

Don Wilcox is looking for some good programs to run at the upcoming Personal Computer Fest. If you have something to offer, contact Don or myself.

Remember! The new TECH session starts this month. They will be held one hour before the start of the business meeting, and that's 3PM this month. If you're having problems with either equipment or programming come early and we will try to help.

Those who ordered disks and have not been contacted or received them can pick them up at the meeting

Cassette librain Ron Friedel will give a demo fo the advanced music system from APX. Nick Liberski, our vice president, will show us how to store the spoken word (real speech, not synthetic) in the computer's memory and say it back. And we might have an upgraded 400 with the INHOME keyboard.

Anyone owning LETTER PERFECT can return it to LJK for an upgrade to version 3.0. There are some new commands and improvement in some functions, but the best part is the 80 column capability. After you have seen it run with 80 columns it makes the BIT-3 80 column board look like a good investment. Cost of upgrade is \$30.00 and first reports from those who have upgraded are favorable. Turn around time on disks is one to two days while cartridges take two to three weeks. If send in a cartridge, be sure to indicate whether you want the 80 column version.

Well that's it for this month - see you on the 15th.

==== UNCLASSIFIED ADS ====

W.T.B.:Used printer. Call Ron Friedel @ 354-1717 or see at next meeting

FOR SALE:Cartridge game - SUBMARINE COMMANDER by Thorn - \$49.95 list - asking \$35 - Bill Simotti - 352-1790

FOR SALE: 32K Axlon Ram Kram for ATARI 400. Best offer. Brad Laacsch - 352-8865

FOR SALE: ATARI Micro-soft BASIC w/manual - Dave Frazer - 542-7242

(MILATARI members may enter ads at no charge - closing date is 1st Sunday of each month.)

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MAGIC LOOKING GLASS - Number 2

A program by Don Wilcox

Last month I presented a program, the Magic Looking Glass, which could foretell your future and answer questions about your innermost secret desires with all text in graphics mode 3 to 11.

This month's program will also allow you to write text in graphics modes 3 to 11. It includes a stick routine to move the text characters around on the screen without using player-missile graphics.

You will need the routine saved from last month's column. Do the following:

ENTER "D:TXTPLT"

This will load lines 20000 through 20090 which will be appended to this month's program. This routine can be added to any program that requires the use of text characters in graphics modes of 3 or higher.

The MAGIC LOOKING GLASS - Number 2

```
1 REM D. WILCOX - MILATARI - JAN. 1983
2 REM TEXT IN GRAPHICS MODES 3-11 WITH JOYSTICK MOVEMENT OF TEXT
  DOES NOT USE PLAYER MISSLE GRAPHICS
3 REM CHANGE GRAPHICS MODE IN LINE 10 AND EXPERIMENT.
  THE LOWER THE MODE #, THE FEWER THE CHARACTERS YOU CAN PUT ON SCREEN
5 DIM A$(20):A$=" MILATARI "
6 REM CHANGE DIMENSION STATEMENT IF YOU DESIRE LONGER STRINGS,
  PROVIDED THEY FIT ON ONE LINE OF THE SCREEN
7 REM LEAVE A BLANK SPACE AT BEGINNIG AND END OF STRING.
  ACTS AS AUTOMATIC ERASER WHEN MOVING TEXT.
8 REM APPEND THE SUBROUTINE "TXTPLT" FROM DECEMBER MILATARI NEWSLETTER
  BEFORE RUNNING THIS PROGRAM
9 GOSUB 20000
10 GRAPHICS 7
20 FOR K=1 TO LEN(A$):A=ASC(A$(K,K)):U=USR(1536,A,2,X+K,Y):NEXT K
30 S=STICK(0)
40 X=X+(S=7)-(S=11):Y=Y+(S=13)-(S=14)
50 IF X<1 THEN X=0
60 IF Y<1 THEN Y=0
70 GOTO 20
110 REM GRAPHICS MODE 10 REQUIRES A COLOR CHANGE TO SEE TEXT
```

If you do not have last month's program, the routine is reprinted on page 7.

* * * * *

This pair of pokes will allow reading of disk sectors sequentially, ignoring sector links. Very useful if you have a file with sector links messed up. (from HACE Newsletter Nov/Dec 82)

POKE 4148,234:POKE 4149,234

"TXTPLT"

(Subroutine used with the Magic Looking Glass program)

```

20000 ML=1536:FOR I=0 TO 252:READ A:POKE ML+I,A:NEXT I:RETURN:REM A=USR(1536,CHR,COLOR,COLUMN,ROW)
20010 DATA 104,240,10,201,4,240,11,170,104,104,202,208,251,169,253,76,164,246,104,133,195,104,201,128
20020 DATA 144,4,41,127,198,195,170,141,250,6,224,96,176,15,169,64,224,32,144,2,169,224,24,109,250,6,141,250,6,104
20030 DATA 104,141,251,6,104,104,141,252,6,14,252,6,104,104,141,253,6,133,186,166,87,169,10,224,3,240,8,169,20,224
20040 DATA 5,240,2,169,40,133,207,133,187,165,88,133,203,165,89,133,204,32,228,6,24,173,252,6,101,203,133,203,144
20050 DATA 2,230,204,24,165,203,101,212,133,203,165,204,101,213,133,204,173,250,6,133,187,169,8,133,186,32,228
20060 DATA 6,165,212,133,205,173,244,2,101,213,133,206,160,0,162,8,169,0,133,208,133,209,177,205,69,196,72,104
20070 DATA 10,72,144,8,24,173,251,6,5,208,133,208,224,1,240,8,6,208,38,209,6,208,38,209,202,208,228,104,152,72
20080 DATA 160,0,165,209,145,203,200,165,208,145,203,104,168,24,165,203,101,207,133,203,144,2,230,204,200,192
20090 DATA 8,208,183,96,169,0,133,212,162,8,70,186,144,3,24,101,187,186,102,212,202,208,243,133,213,96,0,1,28

```

* * * * *

BRAIN PUZZLE

Solution to Puzzle 4: Winner - David Weir

David's BASIC program provided the correct answer as the time 12:33

The program simply loops through all possible combinations of hours (1-24) and minutes (1-60) and then compares the square of each of the two numbers added together against the two numbers represented as digital time. Here is the program listing;

```

5 REM PUZZLE 4 , ALL TRIES BASED ON A 24 HOUR CLOCK
10 FOR J=1 TO 24
20 FOR I=1 TO 60
30 X=I*I+J*J
40 Y=J*100+I
50 IF X=Y THEN PRINT "ONE POSSIBLE SOLUTION IS ";Y
60 NEXT I
70 NEXT J
80 PRINT "NO OTHER POSSIBLE TIMES"

```

PUZZLE 5: You still have time to enter your list of AMICABLE NUMBERS. Come on all you math freaks - lets have your list.

```

#####
#   PUZZLE # 6   #
#####

```

THE NARCISSISTIC CUBES

Narcissistic cubes are positive integers that exactly equal the sum of the cubes of their digits. Thus, 370 and 371 are both narcissistic cubes since

$$\begin{aligned}
 370 &= 3^3 + 7^3 + 0^3 \\
 371 &= 3^3 + 7^3 + 1^3
 \end{aligned}$$

However, $483 \neq 4^3 + 8^3 + 3^3$.

Excluding the trivial case of 1, only two other narcissistic cubes exist. What are all four narcissistic cubes?

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STRING HANDLING ATARI 8K BASIC vs. ATARI Microsoft BASIC (from ATARI DEMOPAC #1)

The major difference between ATARI Microsoft and ATARI 8K BASIC is in the handling of string variables. Here is the 1st in a series of articles giving an overview of the ATARI 8K approach to strings, and a comparison with the ATARI Microsoft method.

It is often necessary to split strings into pieces called substrings. In ATARI Microsoft BASIC, this is accomplished with special functions, MID\$, RIGHT\$ and LEFT\$. In ATARI 8K BASIC, strings are split easily by using a subscript on the string variable. For example, A\$(5,10) results in a substring which starts at the fifth character of A\$ and ends at the tenth character. If only one number is given in the subscript, the substring will start with that character and end with the last character of the string.

Here is a table of the ATARI 8K equivalents of ATARI Microsoft string functions:

ATARI Microsoft:

MID\$(A\$,X,Y)
LEFT\$(A\$,X)
RIGHT\$(A\$,X)

ATARI 8K:

A\$(X,Y)
A\$(1,X)
A\$(LEN(A\$)-X+1)

The function LEN(A\$) is the same in both types of BASIC, and returns the length, or number of characters (including blanks) of the string A\$.

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MILATARI NEWSLETTER
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* FIRST CLASS *

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